ESTABLISHING A HOLISTIC DEFENSE FRAMEWORK FOR REQUIREMENTS AND ACQUISITION PROCESSES

BY

COLONEL BOYD BANKSTON
United States Army

USAWC CLASS OF 2008

Prudens Futuri

U.S. Army War College, Carlisle Barracks, PA 17013-5050

		Form Approved OMB No. 0704-0188
Report Documentation Page		

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE **15 MAR 2008**	2. REPORT TYPE **Strategy Research Project**	3. DATES COVERED **00-00-2007 to 00-00-2008**
4. TITLE AND SUBTITLE **Establishing a Holistic Defense Framework for Requirements and Acquisition Processes**		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S) **Boyd Bankston**		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U.S. Army War College ,122 Forbes Ave.,Carlisle,PA,17013-5220**		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT
See attached

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT **Same as Report (SAR)**	18. NUMBER OF PAGES **36**	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**			

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

USAWC STRATEGY RESEARCH PROJECT

ESTABLISHING A HOLISTIC DEFENSE FRAMEWORK FOR REQUIREMENTS AND ACQUISITION PROCESSES

by

Colonel Boyd Bankston
United States Army

Professor Harold W. Lord
Project Adviser

U.S. Army War College
CARLISLE BARRACKS, PENNSYLVANIA 17013

ABSTRACT

AUTHOR: Colonel Boyd Bankston

TITLE: Establishing a Holistic Defense Framework for Requirements and Acquisition Processes

FORMAT: Strategy Research Project

DATE: 25 March 2008 WORD COUNT: 6,882 PAGES: 35

KEY TERMS: Planning Programming Budgeting and Execution; Capabilities Based Planning; Capabilities Based Approach

CLASSIFICATION: Unclassified

   The underlying premise to this topic is that the Department of Defense has a desire to develop and acquire capabilities from a joint rather than Service specific viewpoints. This premise has been supported in numerous directives from former Secretary of Defense Donald Rumsfeld with regards to operational planning, results from the Honorable Pete Aldridge in the Joint Defense Capabilities Study, and finally from recommendations from both the 2001 and 2006 Quadrennial Defense Reviews (QDRs). This topic investigates how the Department of Defense should organize and synchronize the requirements and acquisition processes to provide the best capabilities to the joint warfighter in an economic environment with diminishing discretionary dollars. This paper investigates our current system and provides recommendations on how to transition from these premises to a workable system.

ESTABLISHING A HOLISTIC DEFENSE FRAMEWORK FOR REQUIREMENTS AND ACQUISITION PROCESSES

Since the 2001 Quadrennial Defense Review[1], the Department of Defense has expressed a desire to develop and acquire capabilities from joint rather than Service specific viewpoints. Attempts to transform the defense requirements and acquisition processes to achieve this vision have produced limited results. Past efforts have been labeled "Capabilities Based-Approach" and "Capabilities Based Planning" although each purports to achieve the same end-state. The governance reform integrated process team (IPT) for the 2006 QDR reaffirmed this desire and the 2007 draft Guidance for Development of the Force states that the Department will implement a refined capabilities-based planning (CBP) process by 30 September 2008[2]. This paper will address or provide a holistic framework to synchronize the requirements and acquisition processes with strategic guidance by identifying common criticisms of our current system, describing the desired attributes of a holistic system, identifying and assessing the elements of the framework, and providing recommendations to transform the existing processes to achieve the vision.

In March 2003, the Secretary of Defense selected the Honorable Pete Aldridge to conduct a study to "…examine and improve DoD processes for determining needs, creating solutions, making decisions, and providing capabilities to support joint warfighting needs."[3] "The recommendations from that study were reflected in the Strategic Planning Guidance (SPG) for Fiscal Years 2006-2011 (March 2004)[4] and called on the Department to institutionalize capabilities-based planning."[5] Even though the Secretary directed the implementation of Capabilities Based Planning in SPG 06-11,

no implementing instructions were developed and the elements of CBP and the linkages among them were never formally codified. The staff proponents within the Department of Defense for requirements and acquisition processes attempted to meet the Secretary's guidance but must still make improvements to meet his vision.

Based upon the author's experience working with the requirements and acquisition process since the inception of the Joint Capabilities and Integration System (JCIDS), the process we know today:

- Consists of separate and independent processes and process owners that have been clustered together to drive the development of capabilities

- Enables processes and process owners to present separate and distinct views of the future, capability gaps, priorities, and remedies to the senior leadership of the Department without a basis of common assumptions

- Allows individual processes to compete against each other rather than working together to produce the best recommendations for decision

- Results in processes and players producing multiple #1 capability priorities versus a system that works together to produce a comprehensive list with a single #1 priority [6]

To develop a holistic defense framework for the requirements and acquisition processes we must begin by defining the vision or the desired end-state. The Joint Staff J8 proposed a definition of Capabilities-Based Planning (CBP)[7] based upon Paul Davis' work on this subject. He defined CBP as: planning under uncertainty to "…provide capabilities suitable for a wide range of modern-day challenges and circumstances while working within an economic framework that necessitates choice."[8] This definition recognizes that we must provide the warfighters the capabilities they need but we are constrained by budget pressures and must make tough choices and trade-offs. To develop recommended improvements to current processes, we will:

present a list of desired attributes for a Capabilities Development Process; describe the state of the current capabilities process; identify the underlying causes preventing a holistic framework; and recommend improvements to address the root causes.[9]

Desired Attributes for a Holistic Defense-wide Framework

The desired attributes for a defense-wide capabilities development process must address the following key questions:

1. "What does the joint force need to be prepared to do? When?"

2. "Are the capabilities that are or will be available adequate and balanced?"

3. "What are the priority issues requiring greater effort?"

4. "What are the priority capability gaps within these issues?

5. "How should the priority gaps be addressed?

6. "How does the Department find the resources to pay for the new capabilities?"

7. "What affordable mix of programs will provide sufficient capability at acceptable risk?"

8. "Is the system executing the decisions that were made?"[10]

In theory, strategic guidance addresses the first question by providing the information needed for planning what military forces need to be prepared to do both now and in the future. In reality, the timeframes over which strategic guidance applies is usually unspecified (see table1). In order to balance the near-term needs of the warfighter with the longer-term requirements to meet future challenges, we must define near, mid, and far-term timeframes and ensure strategic guidance and capability development priorities take each into account.

Strategic Guidance	Time Horizon	Specified Update
National Security Strategy	Unspecified	Annual
National Defense Strategy	Unspecified	Quadrennial
National Military Strategy	5-7 years[11]	Biennial
National Military Strategies for …[12]	Unspecified	Unspecified
Quadrennial Defense Review	Unspecified	Quadrennial
Force Employment Planning Guidance		
Unified Command Plan	Unspecified	Biennial
Contingency Planning Guidance	Unspecified	Biennial
Strategic Guidance Summaries	Unspecified	As needed
Security Cooperation Guidance	Unspecified	Biennial
Joint Strategic Capabilities Plan	Unspecified	Biennial
Global Force Management Guidance	Unspecified	Biennial
Capabilities Development Planning Guidance		
Strategic Planning Guidance (now Guidance for Developing the Force(GDF))	Next FYDP	Biennial (or annual)
Joint Planning Guidance	Next budget	Biennial (or annual or rolling)
Transformation Planning Guidance (included in GDF)	Unspecified	Unspecified
Defense Planning Scenarios	FYDP+1 and FYDP+11	Biennial

Table 1. Strategic Guidance Time Horizons and Nominal Updates[13]

Once the Department has identified what missions/tasks forces need to do and when, we can address the second desired attribute -- determining whether the capabilities available or expected to be available will be adequate to accomplish the missions in the strategic guidance. Adequacy in this context includes both proficiency and sufficiency. A lack of proficiency in a capability indicates that the Department either cannot perform the anticipated tasks or missions at all or that they cannot be performed to standard. A lack of sufficiency would indicate that we may have the capabilities we need in the force but there may not be enough to meet all of our needs specified in strategic guidance. Lastly, the concept of balancing the capabilities indicates that while our future force may have deficiencies in some capabilities we will also have surplus or

overmatch in others that should be decremented to remain within our fiscal constraints. This will require a holistic joint assessment of our capabilities against the range of missions we expect our forces to conduct.

The third attribute revolves around identifying issues requiring greater effort. Currently, each combatant command provides priorities to the Department through different instruments such as their Integrated Priority Lists (IPLs), their Program Review issue submissions, and their input through the Chairman's Risk Assessment (CRA) process. Each combatant command provides their issues in priority order but there is no established method of distinguishing the single definitive priority list within the Department. Further, the shortfalls from an individual combatant command perspective are often a matter of apportionment or allocation and may not truly represent a shortfall to the Department. To complicate this situation, the Services maintain their own priorities as they develop their Program Objective Memorandum (POM) submissions and they rarely coincide with the combatant commands desires due to the timeframes of concern to each. While it might be ideal to identify a complete 1 to n list of priorities within the Department, an effective capabilities development process must at least be able to identify the highest priority issues. The Vice Chairman of the Joint Chiefs of Staff ADM Giambastiani, as Chairman of the Joint Requirements Oversight Council (JROC), implemented such a process in 2006. Known as Capability Assessment Process, it identified the Most Pressing Military Issues (MPMI) based upon input and synthesis of strategic guidance, combatant command, Service, OSD, and Joint Staff input. The JROC endorsed the initial list 18 Oct 06[14]. The term MPMI has since been

dropped and these issues are simply referred to as Chairman's Capability Priorities. This process is depicted in figure 1 below.
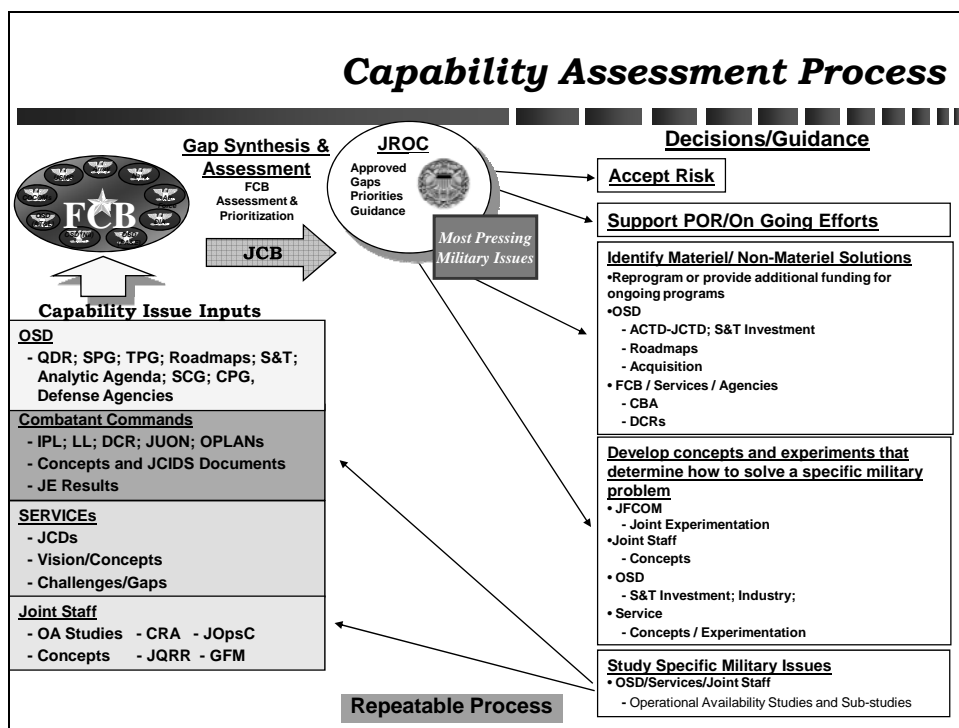

Figure 1. Capability Assessment Process[15]

The priority of the issues identified in the capability issue inputs should be determined by assessing the importance of the issues based upon strategic guidance priorities, urgency of the issue, and the risk associated with the issues. Based upon the author's experience on the Joint Staff J-8 dealing with the capability issue inputs from the Capability Assessment Process the complexity of this task cannot be underestimated. The initial list consisted of several hundred issues but after elimination of duplicates and prioritization of the remainder; the JROC selected twelve to focus on solving and identified another nine that were of interest but required additional analysis before they could provide guidance for resolution[16].

Once the highest priority issues have been identified, the fourth attribute provides or identifies the priority gaps within the most important issues. Not all issues will or should result in capability gaps. A greater fidelity of analysis on the important issues should identify priority gaps as well as follow-on analysis or recommendations for disposition that might be necessary to resolve the issues of our third attribute. As Figure one indicates, a thorough assessment of the issues is necessary to determine the appropriate actions to address these select issues. Actions on the list of priority issues falls into five categories: "accept risk"; "support program of record/on-going efforts"; "identify materiel/non-materiel solutions"; "develop concepts and experiments to solve a specific problem"; and "further study is required" to scope or understand the issue. Many of these actions will not result in an immediate solution. This is particularly true where the required action requires a materiel solution or a new/modified joint concept. Consequently, some of the highest priority issues will likely span multiple program budget review cycles before solutions can be implemented.

From a procedural viewpoint, the Department's current processes already address the fifth attribute of a defense-wide capabilities development process. The Department, or more specifically each Service, is well trained in identifying solutions for capability gaps and providing analytic rigor to support those gaps. The challenge for the Department will be in determining or allocating responsibility for solving these gaps.

Attributes 6 and 7 deal with how the Department should fund the priority issues and capabilities and maintain an affordable mix of capabilities to meet challenges that have been identified in strategic guidance. It is no surprise that the Department will have to operate within fiscal constraints and this implies that the Department has to

identify candidate programs to decrement to free funds for higher priorities. This will require a holistic analysis of all the capabilities related to the range of missions identified in strategic guidance and the identification of the low and high priority capability missions.

The final characteristic needed for a holistic defense framework for requirements and acquisition is the ability to assess our conformance with the decisions that were made. This will include requirements, acquisition, and budget decisions. The 2006 QDR identified the need to align authority and accountability through Joint Capability Portfolios.[17] The Department of Defense has experimented with the portfolio management construct since the 2006 QDR and is using it to assess conformance with acquisition and budget decisions. The Department's intent is to oversee these portfolios with senior DoD personnel and use them to ensure compliance with strategic guidance.

The validation of requirements, or required capabilities, falls under the Title 10 (United States Code) responsibilities of the Chairman of the Joint Chiefs of Staff (CJCS) and the JROC. As the representative of the combatant commands, the CJCS will advise the Secretary of Defense as to the extent that program recommendations and budgets conform to strategic guidance and combatant command requirements. Portfolio management assessments in conjunction with the CJCS' oversight of 'requirements' provide the mechanisms necessary to ensure we are following our strategic guidance. After identifying and discussing the attributes necessary for a holistic defense-framework for capabilities development, we can identify the existing processes and improvement necessary to meet our vision.

"SPG 06-11 tasked the USD(P) to develop recommendations for capabilities-based planning policies, procedures, and lexicon."[18] The draft "Guidance on Development of the Force (GDF), FY 10-15 reaffirms this desire and specifies that "USD(P) in collaboration with the Director of Administration and Management and DoD Components, will publish guidance to define and synchronize capabilities-based planning roles and responsibilities of the CJCS, Combatant Commands, Military Departments, DOD Agencies, and other DoD Components."[19] The GDF specifies that this task will be completed by September 2008. While there is no formal overarching policy to define or holistically guide the capabilities development process or CBP, there several elements within DoD that contribute to capabilities development but they must be synchronized to develop a holistic framework.[20] These elements include:

- Strategic Guidance documents and the Planning, Programming, Budgeting, and Execution System (PPBE)

- Analytic Agenda

- Joint Concept Development and Experimentation (JCD&E)

- Joint Capabilities Integration and Development Systems (JCIDS)

- Defense Acquisition System[21]

Strategic Guidance/PPBE

Strategic Guidance documents at the uppermost levels include: The National Security Strategy (NSS), The National Defense Strategy (NDS), and The National Military Strategy (NMS). These documents tend to be "touchstone" documents and leave a lot of room for interpretation. While this provides flexibility to subordinate organizations, it also enables each of the Services to interpret the same guidance to

support their own goals and objectives particularly with regards to transformation and modernization. Emanating from the Strategic Guidance documents are force employment guidance and capabilities development guidance documents (see table 1). While these documents provide useful guidance they also have limitations:

- Documents are developed on independent timelines by different agencies and are not updated on a regular basis

- Ideas from one document are not carried across to other documents

- Contradictions exist in the documents

- The quantity of strategic documents can be simply overwhelming[22]"

The Departments' Institutional Reform and Governance efforts have led to a revision of strategic guidance to address many of these limitations and translate strategic priorities into force development guidance. The draft GDF will incorporate: Science and Technology Guidance; Transformation Planning Guidance; Global Posture Guidance; Analytic Agenda Guidance; Joint Concepts & Experimentation Guidance; and the Human Capital Strategy into the GDF and provide the Components force planning and capability priorities that are fiscally informed. While this addresses many of our limitations, it focuses on guidance for the FY 10-15 Program Objective Memorandum (POM) which covers the mid-term but it does not address long-term assumptions and scenarios necessary to synchronize the development of requirements and acquisition processes.

Analytic Agenda

The Analytic Agenda (AA) "facilitates the implementation of strategic QDR priorities and enables more collaborative, transparent, and responsive analysis for planning, programming, acquisition, concept development, experimentation, and

training across the department."[23]   The AA supports senior leader decision-making

across the Department and is comprised of the following activities:

- Defense Planning Scenarios (DPS). The DPSs are selected, developed, and updated by OSD.   Each DPS includes a scenario and a friendly force ("Blue") concept of operations (CONOPS) that is based on the application of the Joint Operations Concepts (JOpsC) family of joint concepts to specific conditions, including geography and enemy force capabilities. The individual DPSs capture assumptions, limitations, and capabilities required to implement military actions across the range of military operations. Services are expected to use the DPSs as a starting point for analyses supporting planning, programming, and acquisition efforts.

- Multi-Service Force Deployment (MSFD). The MSFD builds on the DPS guidance. The MSFD is a detailed "Blue" and "Red" CONOPS, as well as a listing of the capabilities required (forces) for the directed DPS scenario. Based on OSD guidance, the Joint Staff orchestrates the building of the MSFD.

- Analytic Baselines (AB). The AB comprises a scenario, a CONOPS, and integrated data used by the DOD components as the foundation for strategic analysis. Examples of AB include scenarios and supporting data used for computer assisted wargames and theater campaign simulations.

- Baseline Security Posture (BSP).   The BSP reflects the anticipated steady state requirements of the force.

- Operational Availability (OA).   The OA are the primary studies commissioned by OSD to support senior leader decisions that employ the activities of the AA. The Terms of Reference for OA studies are developed by the Joint Staff.[24]

Joint Concepts

Joint Concepts visualize future operations and describe how a commander might employ capabilities necessary to meet future military challenges. They cover a period beyond the FYDP, 8-20 years in the future. The family of Joint Concepts include: the Capstone Concept for Joint Operations; the Joint Operating Concepts; Joint Functional Concepts; and Joint Integrating Concepts.[25]

Joint experimentation (JE) is closely linked to joint concepts. The joint concepts community conducts experiments on proposed concepts to "…assess the effectiveness of the proposed joint warfighting concepts… as well as evaluating a concept's proposed solutions."[26] Additionally, joint experimentation on one concept can result in ideas for future concepts or changes to current concepts. "The ideas for new concepts can be proposed by anyone in the joint concept community (Services, COCOMs, and agencies).[27] The proposals for joint concepts are "…vetted at the general and flag officer (G/FO) level within the joint concept community…and once approved"[28] development is directed by the Director of the Joint Staff. "Once written, the completed concepts are used to guide "blue" force CONOPS in the DPS development and provide the key starting point for Capabilities Based Assessments (CBA)."[29]

Joint Capabilities Integration and Development Systems (JCIDS)

The JCIDS, the Defense Acquisition System and the planning, programming, budgeting and execution (PPBE) process form the principal DOD decision support processes for transforming the military forces to better support the national military strategy and the defense strategy. JCIDS uses an integrated capabilities-based approach that relies on the expertise of all government agencies to identify improvements to existing capabilities and to develop new warfighting capabilities. "JCIDS uses joint concepts and integrated architectures to identify prioritized capability gaps and integrated joint DOTMLPF and policy approaches (materiel and non-materiel) to resolve those gaps. JCIDS documents, capturing capability needs, are prepared and submitted for staffing as needed and do not follow a specified timeline."[30]

The five key documents associated with the JCIDS process are outlined below.

- Joint Capabilities Document (JCD). Captures the results of a Functional Area Analysis (FAA) and Functional Needs Analysis (FNA) and describes/documents capability gaps in the planned and programmed force

- Initial Capabilities Document (ICD). The ICD documents the JCIDS analyses (FAA, FNA, FSA) that describe one or more capability gaps in the planned and programmed force and identifies potential materiel approaches

- Capabilities Development Document (CDD). The CDD captures the information necessary to develop a proposed program(s), normally using an evolutionary acquisition strategy

- Capabilities Production Document (CPD). The CPD addresses the production attributes and quantities specific to a single increment of an acquisition program

- DOTMLPF Change Recommendation (DCR). The DCRs are generated by combatant commands, Services or agencies when it is necessary to change joint DOTMLPF resources to meet a capability gap. They are primarily non-materiel in nature[31]

Tables D-1 through G-1 in CJCSM 3170.01C identify what documents must be completed before each of these key documents are produced and which acquisition documents or activities are dependent on the JCIDS documents.[32]

Defense Acquisition System

The Defense Acquisition System (DAS) is governed by the DOD 5000 series of publications and governs all defense technology projects and acquisition programs. The DAS is separate from JCIDS but it is closely linked to it as well. The DAS identifies and defines the milestones and decisions required to bring an identified capability need to the warfighter in the field. The defense acquisition management framework is depicted in the figure 2 below. "The key decisions associated with this framework are the milestone A (MS A), milestone B (MS B), and milestone C (MS C) decisions."[33]

- MS A- This milestone marks the end of concept refinement and the beginning of the technology development phase. The milestone decision authority (MDA) will approve the technology development strategy (TDS), but a favorable decision DOES NOT mean that a new acquisition program has been initiated.[34]

- MS B- This milestone signifies program initiation and beginning of system development and demonstration (SDD). "The purpose of the SDD phase is to develop a system or an increment of capability; reduce integration and manufacturing risk; and ensure operational supportability."[35] "Programs that enter the acquisition process at Milestone B shall have an ICD that provides the context in which the capability was determined and approved, and a CDD that describes specific program requirements."[36]

- MS C- This is the Production and Deployment phase and is designed to "achieve an operational capability that satisfies mission needs. Milestone C authorizes entry into LRIP (for MDAPs and major systems), into production or procurement (for non-major systems that do not require LRIP) or into limited deployment in support of operational testing for MAIS programs or software-intensive systems with no production components."[37]

"To support the milestone decisions listed above, the capability development process (JCIDS) must provide the following capability documents prior to those decisions:

- ICD for MS A

- CDD for MS B

- CPD for MS C"[38]

We have identified the five existing key processes the Department must leverage to create a holistic framework for requirements and acquisition. Due to the sheer magnitude of various documents and processes providing strategic guidance or direction, our proposed holistic defense framework to synchronize requirements and acquisition must be scoped to address the most important issues under investigation.
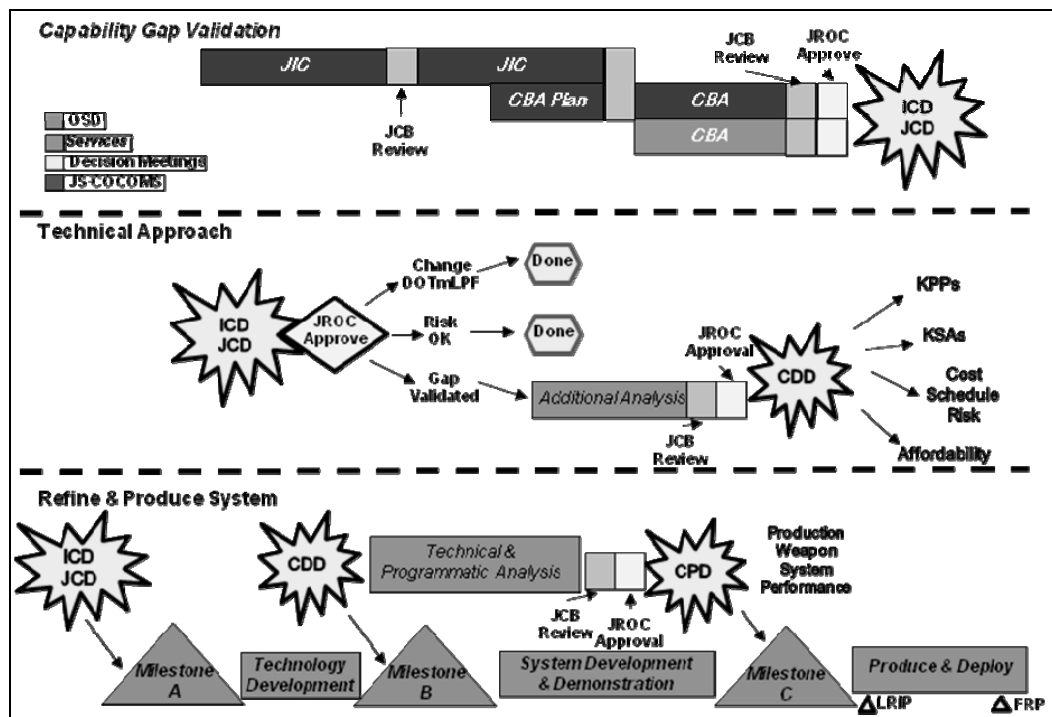
Figure 2 JCIDS and Acquisition Decisions[39]

Scope/Limitations Affecting a Holistic Defense Planning Framework

We will focus on the major elements comprising CBP as well as inputs and outputs from force employment considerations that affect our framework. These considerations include results from operational planning, adaptive planning, global force management considerations, and inputs from the Joint Strategic Planning System. Proposed changes to the acquisition process not codified in DoD 5000 will not be specifically addressed. However, portfolio management will be incorporated into this framework but the specific portfolios, their structure, and authorities are beyond the scope of this paper.

The key to alignment of the processes under consideration is an understanding of the relationships or linkages between strategic guidance and programming/budgeting. The only item that is fixed in law is the presidential budget which is due to Congress on

15

the first Monday in February. All other elements of CBP must be synchronized around this submission to ensure we have a holistic defense framework with all the elements working together. This means that Departmental guidance for developing capabilities (Guidance for Development of the Force (GDF) and Joint Programming Guidance (JPG)) must be provided to Services in sufficient time to build their POMs and recommendations from the Chairman with regards to required capabilities, scenarios, or budget adjustments must be prepared, staffed, and approved by the Chairman in sufficient time to influence the development of Departmental guidance and decisions (Program Decision Memorandums (PDMs)).

Joint Analysis and Decision Support

A key component to addressing all but the last of our eight system attributes resides in analysis and decision support. Joint analyses under consideration refer to many different types of analyses that may vary widely in scope and levels of fidelity, but share the following characteristics: definition of mission objectives and assessment of the adequacy of existing or alternative capabilities to achieve those objectives.

> In principle, DoD currently operates four parallel, overlapping processes that are designed to conduct and manage joint mission analysis for capabilities development planning. They are: COCOM mission analyses; the Enhanced Planning Process (EPP); Joint Capabilities Integration and Development System (JCIDS); and the Analytic Agenda.[40]

> All four of these processes have similar inputs, outputs, and participants but the timing of these process outputs is not well coordinated with the Department's key planning decision points and these processes are not well coordinated with one another.[41]

> "While each process may claim a valid perspective on some capability needs, none can claim an integrated perspective on all issues on a predictable, dependable schedule. This means that senior decision-makers are the first and last points of integration in the Department for answering the question "are the capabilities that are or will be available adequate and available?"[42]

There is a clear need to improve the synchronization of the multiple joint mission

analysis activities currently supporting capabilities development planning. The Institute

for Defense Analyses (IDA) in a 2006 study for the Joint Staff proposed a construct of

three levels of analysis as well as a trade-off analysis that allows us to discuss

synchronization of the holistic defense framework. The results of these levels of

analysis can be summarized as 1) determining issues to be studied, 2) identifying

problems to be solved, and 3) determining specific solutions to the problems. The

mission analysis levels are outlined in greater detail below.[43]

> Level 1 – Issue Identification and Prioritization: Level one issues are low
> resolution, holistic, forcewide analysis of the current force or the
> "programmed force" and its assigned missions to generate first-order
> assessment and prioritization of capability gaps, excesses, and risk.
> This step identifies the most important problems to be studied in greater
> depth, and at the same time identifies capabilities that may be lower in
> priority or overabundant and thus potential "bill-payers" for higher priority
> needs.[44]

The Dynamic Commitment Beyond 2000 wargame series conducted in support of the

2001 QDR is one such example of a holistic force wide assessment. This would be a

major analytic undertaking that would likely take from 12-18 months to complete. This

type of effort should be conducted in conjunction with the QDR or major changes to our

NSS, NDS, or NMS.   Other low resolution, force wide analyses occurring on a more

frequent basis and informing POM development would include: analytic assessments of

capability portfolios to meet requirements of the full range of military operations

(evidenced by DPSs and Joint Concepts); Operational Availability studies, and

capabilities assessment of our planned and programmed force to execute Joint

Functional Concepts.

> "Level 2 – Problem Identification: Level 2 issues are medium and high-
> resolution analysis of prioritized capability issues.   Where level 1

analysis identifies the most important problems to be studied, this step carries out those studies to identify the specific problems that need to be solved through the development of new DOTMLPF capabilities."[45]

This level of analysis would include portions of the JCIDS analysis known as capabilities based assessments (CBAs). Specifically, the FAA and the FNA would identify the prioritized capability gaps that need to be solved. The combatant commands may also conduct this level of analysis through their mission analyses and submit Joint Capabilities Documents (JCDs) to capture gaps in capabilities from their perspective.

> "Level 3 – Solution Development: This level provides high resolution analysis of alternative DOTMLPF and policy approaches and solutions to the prioritized "problems to be solved." This step aims to identify the best options for solving the most important capability problems."[46]

Level 3 analysis would include Functional Solution Analyses (FSAs), Analysis of Alternatives (AoAs), and an emerging analysis know as an Evaluation of Alternatives (EoA) designed to inform a concept decision preceding a MS A decision.

Trade-off Analysis: Trade-off analysis returns to the same broad view of a level-1 analysis. "It provides programmatic trade-offs based upon the solutions generated at level 3 and the lower-priority capabilities identified in any earlier step."[47] Level 1-3 analyses will result in capabilities we need to pursue but our senior decision makers will need analysis to decide how to pay for these capabilities. We will have to compare excess/overmatch capabilities or low-use capabilities identified in level one analyses to recommended solutions in level 3 to determine programs or areas that the Department might accept additional risk in order to reduce risk in the proposed capabilities.

<u>Synchronization of Processes</u>

The key to establishing an effective holistic defense framework for identifying and acquiring capabilities lies in synchronizing the elements of our process to ensure our

efforts are mutually supporting and provide the best information to senior leaders for decisions. Currently, each of the processes of our framework independently identifies priorities for senior leader consideration without the benefit of understanding the efforts of the other processes. Frequently, each process owner will cite combatant command IPLs as sources for their priorities yet their recommendations differ significantly leaving the decision maker to decipher the true priorities.

There are three important actions that must be addressed to ensure synchronization. First, since we recognize that priorities for current operations may not be the same as those for long-term modernization or transformation efforts, we must establish standard definitions for near, mid, and long-term requirements so that we can work on the issues or challenges in each of these timeframes without presenting conflicting recommendations to decision makers. This will allow decision makers to weight select issues in current operations more heavily than transformation issues if so desired. Second, we must identify the key decisions that we need to influence and the information from the individual elements necessary to facilitate those decisions. In many cases this will require the synthesized information from multiple elements that make up this framework. Consequently, all the players in each of the elements must know what information to expect from the other elements and what information they should provide to others. In short, all elements should understand the inputs and outputs of each element within the framework. The last key action to ensure synchronization is to codify how this framework works under directive authority. Ideally, this would require a DoD Directive since several of the framework elements fall under the singular authority of DoD.

The timeframes for decisions across the Department are typically binned into categories of near, mid, and long-term actions. Unfortunately there are no definitive and accepted common definitions for these terms. Intuitively, we understand that near-term is close in but what are the limits? The answer to this question should be based upon our budget cycle and the Future Years Defense Program (FYDP). Since we have a two year budget cycle[48] near-term requirements should considered from "now" through budget year 2 (2-3 years out), mid-term is 4-7 years out, and long-term is 8 years and beyond. The FYDP officially summarizes resources associated, by fiscal year, with DoD programs as approved by the Secretary or Deputy Secretary of Defense. It addresses the "prior, current, budget and program years"[49], shown in Figure 3.[50]

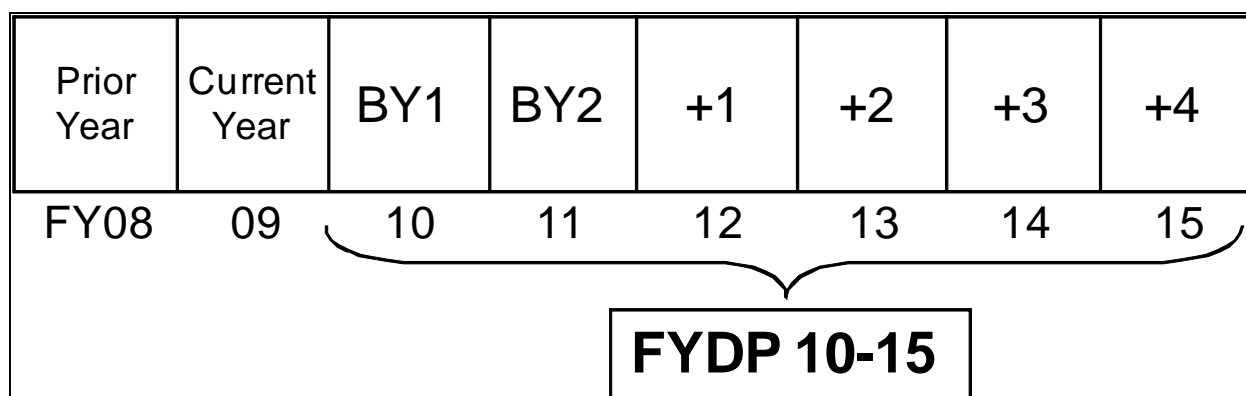| Prior Year	Current Year	BY1	BY2	+1	+2	+3	+4
FY08	09	10	11	12	13	14	15

FYDP 10-15

Figure 3. Future Years Defense Program

For the FY 10-15 POM submission the Components will submit their input to OSD in July of 2008 to be incorporated in the Presidential Budget (PB) and submitted to Congress in February 2009. Since this submission covers the fiscal years 10-15, near-term requirements should include those that fall into the current year (execution year) and budget years 1 and 2. Near-term in this example would include the year of execution (FY09) and the budget years FY10 and FY11. These should be considered near-term because once a change has been identified in these years regardless of the

source, the sponsors of proposals must submit change proposal (CP) for consideration to modify either of the budget years. Additionally, year of execution issues (particularly urgent operational needs) are processed through the Joint Rapid Acquisition Cell and that activity provides the ability to reallocate funds during the year of execution.

The four remaining years in the FYDP should be considered mid-term because they are beyond the near-term yet the Department can account for them in upcoming Budget Estimate Submissions (BES) through the normal identification process used in each of the CBP elements. The last timeframe requiring definition is long-term. For simplicity sake we'll state that long-term is beyond the FYDP or eight or more years in the future. The transformation planning guidance (TPG) identifies long-term as 15-20 years in the future while DPSs are developed at 8 and 20 years out. Since DPSs are theoretically based upon joint concepts and the JOpsC-DP specifies an 8-20 year horizon, it makes sense to consider all the years beyond the FYDP as long-term.

The second key action in synchronizing the elements of CBP is to identify the key inputs and outputs of each our elements to ensure that the Department is leveraging the efforts/findings from across the Department and ensuring unity of effort. This includes understanding what decisions have to be made and how we should influence them. For an effective defense framework to synchronize the requirements and acquisitions processes for the joint warfighter, the CJCS needs to ensure that he has the ability to advise the Secretary of Defense on the requirements of the combatant commands, the extent to which the programs of the Services and agencies meet these requirements, and provide recommendations to resolve these shortcoming to ensure compliance with strategic direction (see Chairman's Functions, § 153, Title 10, US code). These

functions will continue to be valid even under the emerging portfolio management construct although the analysis supporting budget submissions may be the result of portfolio management operations rather than individual Service input. Regardless of how the budgets are built, there are three key decisions/documents that the CJCS needs to influence to fulfill these functions: Guidance for Developing the Force (formally known as Strategic Planning Guidance); Joint Programming Guidance (JPG); and Program Budget Decisions and Memoranda (PBDs and PDMs) emanating from the Program Budget Review.

The Chairman needs three documents intended to influence each of the key decisions/documents discussed above. The CJCS does not currently have a document to influence the GDF (formally the SPG) but doctrinally speaking the CJCS previously produced a Joint Planning Document (JPD)[51] to influence the Defense Planning Guidance. While the JPD has not been produced since 1999, the type of recommendations identified for the JPD are still needed by the CJCS to influence the GDF regardless of what that guidance document might be called. The Joint Staff J5, in conjunction with ongoing re-write of JSPS and governance review efforts, has recognized the need for and indicated a desire to prepare a similar Chairman's advice document although the scope and name are undetermined. The anticipated publication date for the GDF is March of the 'on-year' budget cycle. This means that it would be published in an even year roughly six months prior to Component POM submissions. In order to influence this document, the CJCS needs to forward his recommendations for the GDF by the preceding October. This would imply that any inputs from the framework elements must be submitted to the Chairman no later than August of the off-

year which also corresponds to the start of the PBR to allow those inputs to be considered in that venue as well.

The Chairman's Program Recommendation (CPR) is intended to provide the CJCS' recommendations to influence the JPG. The Chairman's Program Recommendation provides the Chairman's personal advice for capabilities and programming considerations to the SecDef prior to publishing the JPG. The CPR articulates critical capability issues for the SecDef to consider when setting DOD priorities and performance goals in the JPG. The content of the JPG (influenced by the CPR) guides the development of the Service and Defense agencies' Program Objective Memoranda (POMs). For the CPR to be effective in influencing the JPG, the Chairman must provide that document at least a month in advance of the publishing date of the JPG. It is not necessary to provide it earlier as the integrated issues are vetted and briefed to the JROC approximately two months out and senior defense and Service participants that typically participate include the Defense Acquisition Executive, Director Program Analysis and Evaluation, and the Comptroller

The Chairman's Program Assessment (CPA) is the last of the advice documents and provides the Chairman's personal assessment of Service and Defense agencies' POMs and Budget Estimate Submissions (BESs) to the SecDef to influence the Program and Budget Review (PBR). SecDef decisions for POM and BES adjustments are communicated via the Program Decision Memoranda (PDMs) that adjust the POMs and the Program Budget Decisions (PBDs) that adjust the BES. Since PDMs are normally released in November, the CPA should ideally be released at least one month prior to the PDMs. In practice, the CPAs since 2005 have not been approved by the

Chairman until November but since the input necessary to build the CPA has been

submitted to the Joint Staff for integration and review by the beginning of the program

review (late August/early September), the Joint Staff has been able concurrently refine

the issues, prepare the draft CPA, and ensure the essence of the most important issues

are incorporated into the PBR before the final approval by the CJCS.

The last aspect of synchronization relates to the inputs and outputs from each

element within the framework. Once again, the individual elements within our

framework include: PPBE; JSPS; the Analytic Agenda; the Capability Assessment

Process; JOpsC-DP; Joint Experimentation; JCIDS, the Defense Acquisition System

(DAS); Global Force Management (GFM); and Adaptive Planning (AP). Some of these

elements are strictly under the purview of OSD while some are uniquely under the Joint

Staff, and still others have shared responsibilities. Each of these processes, with the

exception of the Capability Assessment Process, have guiding and or implementing

directives so the purpose here is not contravene the existing principles but to illustrate

how products from each of the elements could and should support the other elements.

Figure 4 illustrates the proposed framework with all of the elements of CBP. The left

hand portion of figure 4 shows the elements and some of the key documents necessary

to identify and acquire capabilities for the joint warfighter. The synchronization of these

activities allows the Chairman to accomplish two things: provide advice to the SecDef

to influence Departmental guidance before publication, and provide recommendations

to affect development or modification of our budgets. The star burst in lower right

corner of figure 4 represents the "Employ the Force" activities for which we're trying to

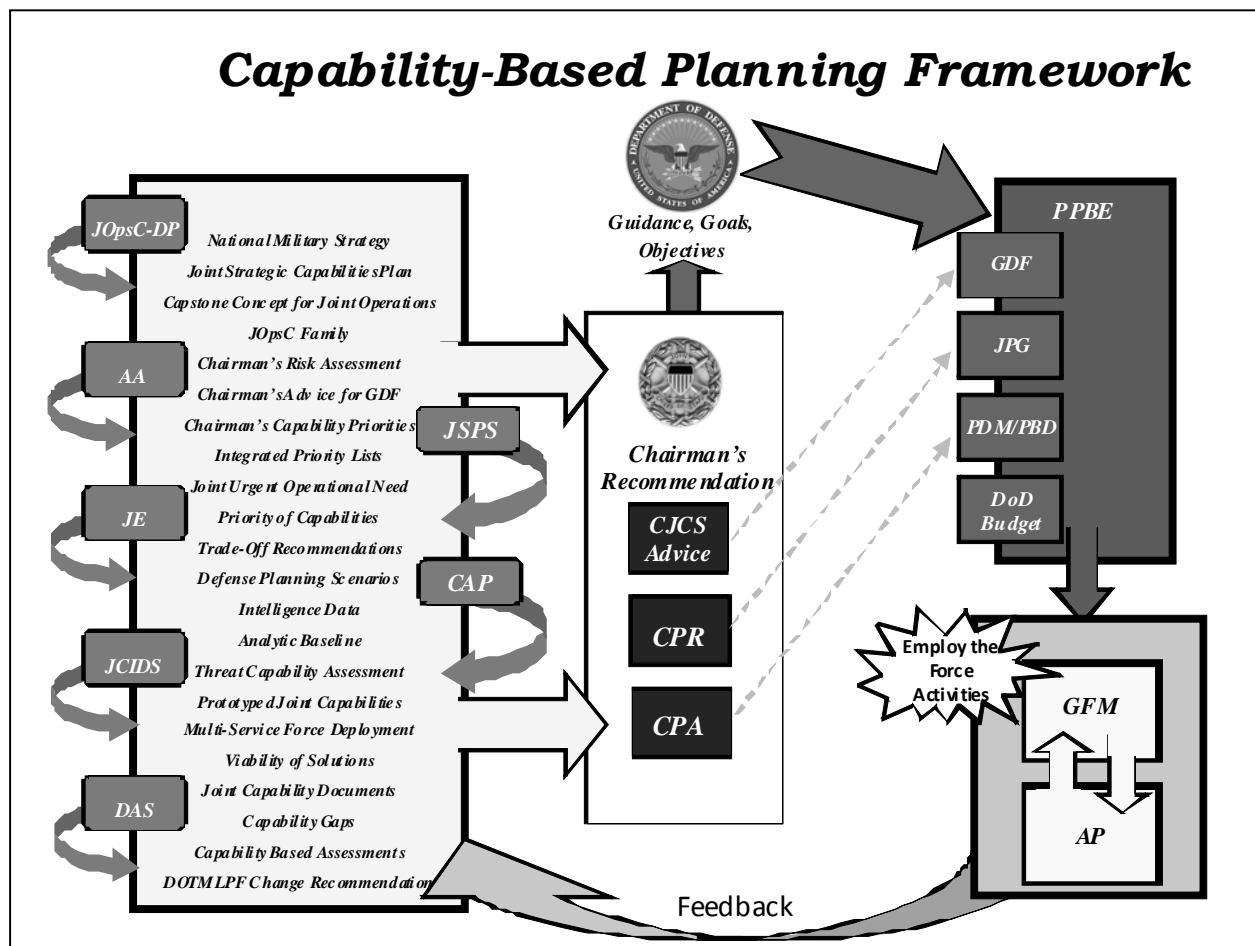provide capabilities and which provides feedback into the capabilities development

processes.

Figure 4. Capabilities Based Planning Framework[52]

Recommendations

There are several key recommendations necessary to implement a holistic

defense framework for requirements and acquisition. First and foremost the

Department of Defense must provide an overarching guidance document to synchronize

all elements within the framework. We have proposed six major elements to consider

within this framework: Strategic guidance (includes role of JSPS); PPBE; JCD&E;

Analytic Agenda; JCIDS; and the Defense Acquisition System. This overarching

directive should identify the responsibilities and linkages between each element and provide timelines to ensure synchronization of efforts to inform senior leader decisions. This will not require a complete re-write of existing guidance documents for each element although some will have to be adjusted to comply with the directive.

Second, this effort should establish standard definitions for near, mid, and long-term timeframes and incorporate these definitions into strategic guidance documents as well as ensure all elements within this framework comply with these definitions. Based upon our ability to influence decisions within these timeframes we propose that near-term be 2-3 years and coincide with the year of execution and budget years 1 and 2. The Mid-term timeframe should be the remaining years of the POM—program years 1-4 and long-term requirements should be those beyond the FYDP or 8 or more years in the future. This will synchronize timeframes for joint concepts as well as DPSs with the budget cycle and ensure that Guidance for Developing the Force is equally applicable to all elements of CBP.

The last recommendation is establish a three level joint analysis construct to support this framework. Level 1 analyses are a holistic forcewide assessment of our capabilities across the range of military operations. The initial force wide assessment should be conducted in close coordination with the QDR in an effort similar to Dynamic Commitment Beyond 2K Wargame (DCB2K). Level 1 analyses of our capabilities should also be performed against capability portfolios and/or Joint Functional Concepts to ensure that our capability portfolio strategies are executable and provide the capabilities that the joint warfighter needs. These efforts would be required when we undertake major changes to our portfolios, change our strategy, or concepts

(particularly Joint Functional Concepts) of how we perform missions/functions or operations.

Level 2 analyses seek to build upon all of our level 1 assessments and answer the questions of what problems need to be solved. This is akin to amalgamation of the functional area and needs analysis within JCIDS. This effort would result in prioritized capability gaps that need to solved. In some cases these may be materiel solutions but in others it might be sufficient to modify concepts, doctrine, or TTPs to adequately address the shortfall.

The level 3 analyses would generate the solutions to the problems identified in level 2 analysis. This in effect reflects the functional solution analysis prescribed in JCIDS and Analysis of Alternative (AoA) studies prescribed in DoD 5000.2R. These type of analysis have been historically performed by the Components and endorsed by OSD prior to milestone decisions; however, with the advent of capability portfolio managers the responsibility for conducting and approving level 3 analysis should be assessed and incorporated into the overarching directive governing the framework.

In conclusion, while the Department provides guidance for developing future capabilities the elements that use this and other strategic guidance are free to interpret what that guidance really meant to suit their purposes. By synchronizing all the elements and identify responsibilities and support relationships between the elements, the Department will be able to reduce redundant efforts, focus on the most important issues, and provide the joint warfighter the capabilities he needs to meet the national strategy and objectives within a constrained fiscal environment.

<u>Endnotes</u>

[1] Donald H. Rumsfeld, *Quadrennial Defense Review Report* (Washington, D.C.: U.S. Government Printing Office, 30 September 2001), 13-14.

[2] U.S. Department of Defense, *Guidance for Development of the Force (GDF) for Fiscal Years 2010-2015*, Draft, (Washington, D.C.: U.S. Department of Defense, December 2007), 88.

[3] Joint Defense Capabilities Study Team, *Joint Defense Capabilities Study Final Report*, December 2003; available from http://www.paxpartnership.org/files/ACF1223.pdf; Internet; accessed 28 May 2008.

[4] U.S. Department of Defense, *Strategic Planning Guidance (SPG) for Fiscal Years 2006-2011*,(Washington, D.C.: U.S. Department of Defense, March 2004), 42

[5] Boyd Bankston and Todd Key, "White Paper on Capabilities Based Planning," 30 March 06, 2; available from http://www.mors.org/meetings/cbp_II/briefs/bankston_key.pdt; Internet; accessed 1 December 2007.

[6] Bankston and Key, 2.

[7] Ibid, 2.

[8] Paul K. Davis, *Analytic Architecture for Capabilities Based Planning, Mission-System Analysis, and Transformation* (Santa Monica, CA: Rand, 2002) xi.

[9] This methodology was first cited in the Joint Staff White Paper on CBP but is still valid for this paper. See Bankston and Key, 3.

[10] Institute for Defense Analyses, *Improving Integration of Department of Defense Processes for Capabilities Development Planning*, IDA Paper P-4154 (Institute for Defense Analyses, Alexandria, Virginia September 2006) ES-2.

[11] U.S. Chairman Joint Chiefs of Staff, *Joint Strategic Planning System*, Chairman Joint Chiefs of Staff Instruction (CJCSI) 3100.01 (Washington, D.C.: U.S. Department of Defense, 1 September 1999). Certified current as of 12 September 2003.

[12] Over the past couple of years, CJCS has been developing and promulgating National Military Strategic Plans providing additional guidance for the war on terrorism, combating weapons of mass destruction, and cyberspace operations.

[13] Institute for Defense Analyses, 2-4.

[14] Joint Requirements Oversight Council, "Most Pressing Military Issues Approval," Memorandum 211-06, Washington, D.C., 18 October 2006.

[15] Joint Staff J8 Briefing slide, "Capability Assessment Process," this slide was maintained as a stand-alone slide because the data it represents is classified and the process chart was used in numerous briefings regarding Program Budget Review, the Chairman's Program Recommendation, and the Chairman's Program Assessment, Washington, D.C., June 2006.

[16] Ibid.

[17] Donald H. Rumsfeld, *Quadrennial Defense Review Report* (Washington, D.C.: U.S. Government Printing Office, 6 February 2006), 68.

[18] Bankston and Key, 10. The original source for this quote in the white paper was U.S. Department of Defense, *Strategic Planning Guidance (SPG) for Fiscal Years 2006-2011*, 42.

[19] U.S. Department of Defense, *Guidance for Development of the Force (GDF) for Fiscal Years 2010-2015*, Draft, sec 6.9.4.2

[20] Bankston and Key, 2.

[21] Bankston and Key, 5.

[22] Bankston and Key, 6.

[23] U.S. Department of Defense, *Strategic Planning Guidance (SPG) for Fiscal Years 2008-2013*,(Washington, D.C.: U.S. Department of Defense, March 2006), 7.

[24] Bankston and Key, 7.

[25] Ibid.

[26] U.S. Chairman of the Joint Chiefs of Staff Instruction, *Joint Operations Concept Development Process (JOPSC-DP),* CJCSI 3010.02B, (Washington, D.C.: U.S. Chairman Joint Chiefs of Staff, 27 January 2006) D-1.

[27] U.S. Chairman of the Joint Chiefs of Staff Instruction, *Joint Operations Concept Development Process (JOPSC-DP),* CJCSI 3010.02B, (Washington, D.C.: U.S. Chairman Joint Chiefs of Staff, 27 January 2006) B-1.

[28] Ibid.

[29] Bankston and Key, 7.

[30] Bankston and Key 8. See also Chairman of the Joint Chiefs of Staff Instruction, *Joint Capabilities Integration and Development System,* CJCSI 3170.01F, (Washington, D.C.: U.S. Department of Defense, 1 May 2007) A-1.

[31] Bankston and Key, 8.

[32] U.S. Chairman of the Joint Chiefs of Staff Manual, *Operation of the Joint Capabilities Integration and Development System,* CJCSM 3170.01C, (Washington, D.C.: U.S. Department of Defense, 1 May 2007).

[33] Bankston and Key, 9.

[34] Ibid.

[35] U.S. Department of Defense Instruction, Operation of the Defense Acquisition System, DODI 5000.2, (Washington, D.C.: U.S. Department of Defense, 12 May 2003), 8 and Bankston and Key, 9.

[36] U.S. Department of Defense Instruction DODI 5000.2, 9 and Bankston and Key 9.

[37] U.S. Department of Defense Instruction DODI 5000.2, 12 and Bankston and Key 9.

[38] Bankston and Key, 9. See also U.S. Chairman of the Joint Chiefs of Staff Manual, *Operation of the Joint Capabilities Integration and Development System,* CJCSM 3170.01C, (Washington, D.C.: U.S. Department of Defense, 1 May 2007) for specifics on predecessors and dependent documents.

[39] Chairman of the Joint Chiefs of Staff Instruction, *Joint Capabilities Integration and Development System,* CJCSI 3170.01F, (Washington, D.C.: U.S. Department of Defense, 1 May 2007). A-5

[40] Institute for Defense Analyses, ES-3.

[41] Institute for Defense Analyses, 4-3.

[42] Ibid.

[43] Ibid.

[44] Institute for Defense Analyses, 4-5.

[45] Ibid.

[46] Ibid.

[47] Ibid.

[48] U.S. Department of Defense, *Implementation of a 2-Year Planning, Programming, Budgeting, and Execution Process,* U.S. Department of Defense Management Initiative Directive (MID) 913 (Washington, D.C.: U.S. Department of Defense, 22 May 2003), 1-9.

[49] Institute for Defense Analyses, 2-4.

[50] U.S. Department of Defense Instruction, "Implementation of the Planning, Programming, and Budgeting System (PPBS)", DoDI 7045.7, 23 May 1984 (with Change 1, April 9, 1987. See also DoDD 7045.14 "The Planning, Programming and Budgeting System (PPBS)," May 22, 1984, Certified current as of November 21, 2003, and DoD 7045.7-H, "FYDP Program Structure Handbook," June 2003.

[51] U.S. Chairman of the Joint Chiefs of Staff Instruction, CJCSI 3100.01A*,* A-2.

[52] This chart was based upon a draft Joint Staff Chart on Capabilities Based Planning. It was produced in support of a Joint Staff effort to create a CJCSI for CBP but was never published. The chart was modified in January 2008 to account for changes that have occurred

in Institutional Reform and Governance and the Joint Strategic Planning System that were relevant to this framework.